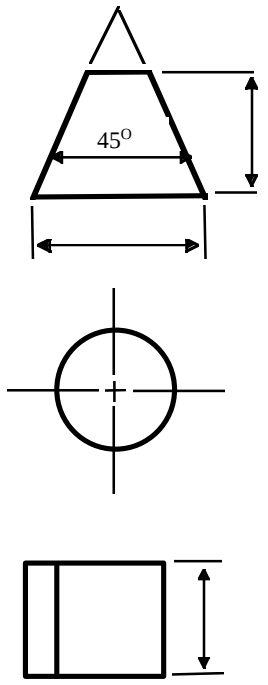
1.24 Personnel shall demonstrate a working level knowledge of engineering fabrication construction, and architectural drawings.

a. Given one of each of the above drawings, read and interpret:

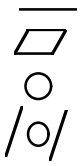
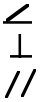
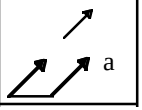
This is a demonstration requirement.

Drawings are miniature as well as picture-like representations of a building or object. Because of the relatively small size of drawings, many components cannot be shown on some drawings exactly as they look. Consequently, designers have to use a special kind of graphic language to indicate the many items that they cannot actually picture. This language employs symbols to represent materials and components. The following tables are examples of basic symbology for the listed topics. To accurately interpret the symbology of a drawing, check the legends and tables on the controlled drawings that are applicable to the project, since different architects and software packages may use unique symbology.

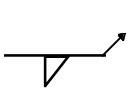
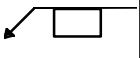
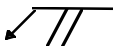
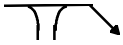
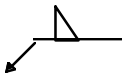
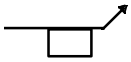
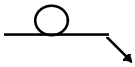
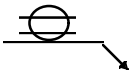
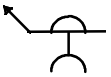
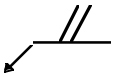
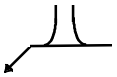
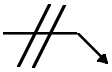
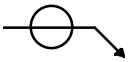
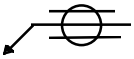
- Basic dimensional and tolerance symbology



Geometric characteristic symbols

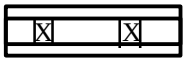
	Type of Tolerance	Characteristic	Symbol
For individual features	Form	Straightness Flatness Circularity (roundness) Cylindricity	
For individual or related features	Profile	Profile of a line Profile of a surface	
For related features	Orientation	Angularity Perpendicularly Parallelism	
	Location	Position Concentricity	
	Runout	Circular runout Total runout	

- Basic fabrication symbology

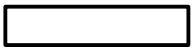
Basic Welding Symbols and Their Location Significance								
	Fillet	Plug or Slot	Spot or Projection	Seam	Back or Backing	Surfacing	Scarf for Brazed Joint	Flange Edge
								
						Not used		
		Not used	Not used	Not used	Not used	Not used		Not used
	Not used	Not used			Not used	Not used	Not used	Not used

- Basic construction symbology

STEEL STUD

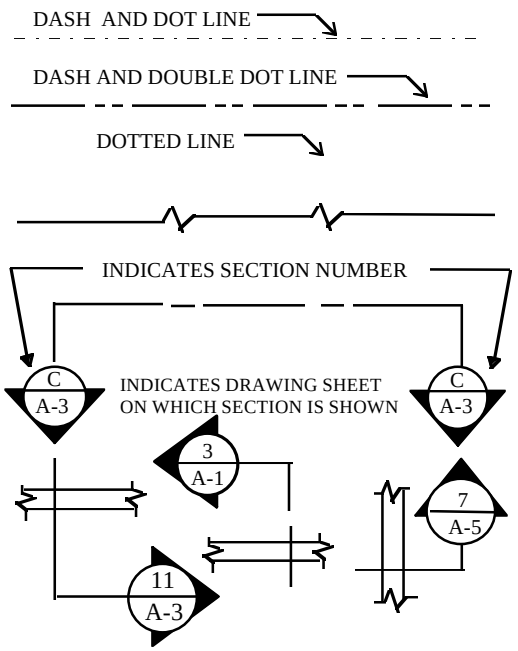


WOOD STUD



DASHED LINE DENOTES SPECIAL FINISH FACE - PLAN/SECTION

- Basic architecture



CENTER LINES, FLOOR LINES IN EXTERIOR ELEVATIONS, PROJECTED LINES

PROPERTY LINES, BOUNDARY LINES

CUT LINE OR HIDDEN LINE

TO BREAK OFF PARTS OF DRAWINGS

SECTION LINES AND SECTION REFERENCES